



Product Evaluation

LVR10 | 0216

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: LVR-10

Effective Date: February 1, 2016

Re-evaluation Date: December 2019

Product Name: Models EME420, EME520, ELF6375DXD Louvers, Impact Resistant

Manufacturer: Ruskin
Air & Sound Control
3900 Doctor Greaves Road
Grandview, MO 64030
(816)-761-7476

General Description:

Model No. ELF6375DXD: The louver is compiled of a single section. The ship section measures at 12" x 36" tall. The wall thickness of the box frame is 0.080" and is constructed from 6063-T5 Extruded Aluminum. The head frame (Item# 1 – Ruskin Drawing No. 70-020578-00B) is measured as 6.0" wide x 4.087" tall x 0.080" thick (wall). The jamb frame (Item# 3 – Ruskin Drawing No. 70-020382-00B) is measured at 6.0" wide x 1.0" tall x 0.080" thick (wall). The sill frame (Item # 2 - Ruskin Drawing No. 70-021130-00B) is measured at 6.0" wide x 0.125" thick (wall). The 6063-T5 Aluminum louver blades (Item# 4 – Ruskin No. 70-020382-00B) 5.88" wide x 5.964" tall x 0.080" thick. Two snap-on Blade Braces (Item# 5 – Ruskin Drawing No. 70-020568-00B) are located on each blade and were 5.041" wide x 4.313" tall x 0.080" thick.

Model No. EME420DD: The EME420DD louver is composed of one horizontal ship section measured at 12" wide x 48" tall. The louver jamb frame (Ruskin Drawing No. 70.021959-00B) IS 4" deep x 0.080" thick, extruded aluminum box frame. The louver head frame and sill frame (both Ruskin Drawing No. 70.020025-00B) were measured as 4" deep x 0.080" thick. The frame contains 27 horizontal extruded aluminum blades (Ruskin Drawing No. 70.022546-00B0) 4" wide x 0.063" thick which are spaced at 1-5/8" and attached to each end of the jamb frame with two #8-18 x 3/4' HWH screw w/#10 neoprene washer.

Model No. EME520DD: The frame is constructed from 6063-T5 aluminum alloy and with a mill finish. The upper frame corners were welded and the lower frame corners are fastened with 2 No. 10 x 3/4" hex head sheet metal screws and a washer. The sill frame is measured at 1.207" x 5". The jamb frames are measured at 1.09" x 5". Each frame is constructed from solid extrusions in which the wall thicknesses vary. The louver is compiled of a single ship section. The ship section measures 12" wide x 36" tall. Each louver is fastened with 2 No. 10 x 3/4" hex head sheet metal screws. The dimensions of the top louver frame is 4.835" x 3.306" and the dimensions of the remaining louver blades is 4.835" x 2.306". The louvers are constructed from solid extrusions in which the wall thicknesses vary.

Limitations:

Design Drawings: The louvers must be installed in accordance with Ruskin Air & Control Drawings shown in Table 1.

Table 1

Model Number	Drawing Number	Sealed, Signature, Sheets
ELF6375DXD	60 022375 00B	Sealed by Chelsea B Welch, 01/06/2015 Sheets 1-20, of 20 dated October 10, 2014
EME520MD	60 022376 00B	Sealed by Chelsea B Welch, 01/06/2015 Sheets 1-21, of 21 dated October 10, 2014
EME520MD	60 022379 00B	Sealed by Chelsea B Welch, 01/06/2015 Sheets 1-20, of 20 dated October 10, 2014

Table 2

Design Wind Pressure

Assembly	Maximum Single Section Width (inches)	Maximum Single Section Height (inches)	Allowable Design Pressure Rating (psf)
ELF6375DXD	87-7/8	119-3/4	±148
EME420MD	87-15/16	144	±120
EME520MD	87-15/16	144	±120

Blade Support: Refer to the design drawings for requirements on blade support.

Product Identification: Each unit must bear a permanent label containing the manufacturer's name, series number of louver, and applicable standards.

Impact Resistance: These louver assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the Inland I zone and the Seaward zone. The louver assemblies passed an impact standard equivalent to Missile Level D specified in ASTM E 1996-04. The louvers may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These louver assemblies will not need to be protected with an impact protective system.

Acceptance of Smaller Assemblies: Louver assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

Installation Instructions

All requirements specified in the IRC and the IBC must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

Anchorage Method: The aluminum louvers must be installed in accordance with the approved drawings.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.